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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,744	09/30/2004	Mizuya Matsufuji	2244.0240000/TGD	4394
26111	7590	03/24/2006	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			LORENCE, RICHARD M	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/509,744	MATSUFUJI ET AL.	
	Examiner	Art Unit	
	Richard M. Lorence	3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/16/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is the first Office action on the merits of Application No. 10/509,744 filed on September 30, 2004. Claims 1-7 are currently pending.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on November 16, 2004 has been considered by the examiner.

Drawings

The drawings are objected to because Figure 8 does not comply with 37 CFR 1.84(p)(2) which requires the use of the English alphabet. The Japanese characters in the figure should be replaced by the corresponding English wording similar to what is shown in Figure 6.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

Claims 5-7 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, these claims have not been further treated on the merits.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 63-43050 A.

JP 63-43050 A discloses a traveling transmission for a working vehicle which, as seen in Figure 3, comprises an auxiliary transmission 4 interposed between a main clutch 2 and a multi-speed-stage mechanical transmission 3. The auxiliary transmission 4, seen in greater detail in Figure 1, is configured as a high-low speed selector device including a hydraulic-operated first hydraulic clutch 13 and a spring-operated second hydraulic clutch 15. Note Figure 2 which shows the direction switching valve 19 for supplying and discharging operating oil to and from the first hydraulic clutch 13 and the second hydraulic clutch 15. The switching valve is configured with the electro-hydraulic circuit shown in Figure 2 such that operating oil is drained from the first hydraulic clutch 13 and is supplied to the second hydraulic clutch 15, interlockingly with the disengagement operation of said main clutch via lever 22. Accordingly, the power transmission is cut out interlockingly with the disengagement operation of said main clutch 2.

Claims 1, 3 and 4 are further rejected under 35 U.S.C. 102(b) as being anticipated by EP 1090798 A1 (Harai et al.).

Harai et al. discloses a traveling transmission for a working vehicle which, as seen in Figure 2, comprises an auxiliary transmission B interposed between a main clutch A and a not shown multi-speed-stage mechanical transmission (see lines 11-15 of paragraph 30). The auxiliary transmission is configured as a high-low speed selector device including a hydraulic-operated first and second hydraulic clutches CL, CH. Note Figure 6 which shows the direction switching valve 44 for supplying and discharging operating oil to and from the first hydraulic clutch CL and the second hydraulic clutch CH. The switching valve is configured with the electro-hydraulic circuit shown in Figure 6 such that the first hydraulic clutch CL and the second hydraulic clutch CH are each disengaged interlockingly with the disengagement operation of said main clutch via pedal 111 (see Figure 13) as described e.g. at paragraphs 88-89. Accordingly, the power transmission is cut out interlockingly with the disengagement operation of said main clutch 2. While the first hydraulic clutch CL and the second hydraulic clutch CH are each engaged by the supply of operating oil and disengaged by draining operating oil, note that Harai et al. further discloses at paragraph 121 that the clutches may be replaced by spring-engaged fluid pressure released clutches by suitably exchanging the inlet and outlet ports of the valves.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 63-43050 A in view of US 6003391 A (Kojima et al.).

JP 63-43050 A does not disclose the particular construction of the multi-speed-stage mechanical transmission 3. Kojima et al. provides evidence that it was known at the time the invention was made to employ a mechanical transmission T1 of a gear continuously engaging type provided with a synchronous clutch 75 or 76 in a traveling transmission for a working vehicle which comprises an auxiliary transmission. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a mechanical transmission of a gear continuously engaging type provided with a synchronous clutch in the traveling transmission of the working vehicle disclosed by JP 63-43050 A in view of the suggestion of Kojima et al. that such an arrangement permits the selection of an appropriate speed reducing ratio as described at column 5, line 59 to column 6, line 26.

Claim 2 is further rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1090798 A1 (Harai et al.) in view of US 6003391 A (Kojima et al.).

Harai et al. does not disclose the particular construction of the not-shown multi-speed-stage mechanical transmission. Kojima et al. provides evidence that it was known at the time the invention was made to employ a mechanical transmission T1 of a gear continuously engaging type provided with a synchronous clutch 75 or 76 in a traveling transmission for a working vehicle which comprises an auxiliary transmission. It would have been obvious to one having ordinary skill in the art at the time the

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invention was made to employ a mechanical transmission of a gear continuously engaging type provided with a synchronous clutch in the traveling transmission of the working vehicle disclosed by Harai et al. in view of the suggestion of Kojima et al. that such an arrangement permits the selection of an appropriate speed reducing ratio as described at column 5, line 59 to column 6, line 26.

Conclusion

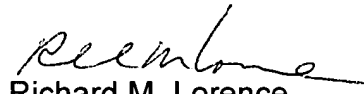
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5669479 A (Matsufuji), US 6199441 B1 (Kanenobu), US 2003/0042104 A1 (Matsufuji et al.) and JP 8-2267 A ((Matsufuji) each show systems for supplying operating fluid to clutches in an auxiliary transmission of a working vehicle.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard M. Lorence whose telephone number is (571) 272-7094. The examiner can normally be reached on Mondays through Fridays from 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Richard M. Lorence
Primary Examiner
Art Unit 3681

Lorence/rml